



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

09/855,199

05/14/2001

Vijaya Raghavan

04899-044001

8175

959 7590 07/31/2007
LAHIVE & COCKFIELD, LLP
ONE POST OFFICE SQUARE
BOSTON, MA 02109-2127

EXAMINER

ALHIJA, SAIF A

ART UNIT

PAPER NUMBER

2128

MAIL DATE

DELIVERY MODE

07/31/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/855,199

Applicant(s)

RAGHAVAN ET AL.

Examiner

Saif A. Alhija

Art Unit

2128

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 May 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6, 12-18 and 20-78 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6, 12-18 and 20-78 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- 1) ☐ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. Claims 1-6, 12-18, and 20-78 have been presented for examination.

Claims 7-11 and 19 have been cancelled.

Response to Arguments

2. Applicant's arguments filed 2 May 2007 have been fully considered but they are not persuasive.

i) Examiner thanks the Applicant for agreeing to the change of title. An amendment to that effect is still required.

ii) Applicant argues that the reference does not disclose at least two distinct entities, graphical representation of a finite state machine as well as at least one graphical function. The Examiner once again cites Figure 19. First, Figure 19 consists of a graphical program representing the provided state diagram. Further, Figure 19 consists of numerous states which belong to the provided state diagram and can be construed as functions since as noted in paragraph 168 of the reference **"In one embodiment of the invention, the state diagram information may include information specifying executable code or source code, referred to below as program code, associated with one or more states. For example, when the user is using a state diagram editor to create a state diagram, when the user places a state in the state diagram, in one embodiment the user may further specify program code for the state."** The states can be construed as functions, which are represented graphically, see left image as well as the graphical representation of the finite state machine, also left image which the reference labels as a graphical program. Applicants argument regarding calling the function from at least two places can be seen in the connection points of each state, for example "Choose Number" which is called by the "Start", "Number is Not Prime", etc states. This argument applies to at least claim 5 as well.

iii) Applicants arguments with respect to claim 12 and 17 are also addressed above in that the states represented in the left image of Figure 19, being the graphical program instantiation of the state diagram to the right, call respective functions as seen in the citation of paragraph 168 above.

iv) Applicants argue the limitations of claim 23. It is noted that the claim states that based on user input the function flow diagram is hidden. This can be as simply seen in the graphical environment provided by the reference in which certain aspects of the graphical program or state diagram are not selected and therefore not seen in the GUI. This is not a novel feature and is akin to closing a window in a GUI.

Art Unit: 2128

v) Applicants argue that the reference does not teach “a function including at least two graphical components” which is then callable. As shown in Figure 19, the graphical representation of the “Number is Not Prime” state/function contains numerous graphical elements such as “The number you choose” and “is not prime” which are represented graphically as well as textually. See also paragraphs 170-172 regarding graphical code.

vi) Applicants argue that the reference does not teach providing a block component representing a graphical function. See paragraph 165 with respect to “block diagram.” With respect to the event driven limitation of the claims, it is unclear how the example functions such as “choose number” and “number is not prime” do not present event driven occurrences since they require a user input event, and a calculation event.

vii) Applicant argues that the reference does not teach, “textually calling a graphically defined function from within an executable model.” See Section 2.ii above since at the very least the states contain textual references such as “The number you choose” and “is not prime” which are invoked in the graphical program.

viii) The Examiner respectfully appreciates Applicants attempt to further clarify the claimed invention both with an interview and an amendment to the claims. However, when taken in the broadest most reasonable interpretation there does not appear to be a patentable distinction between the presented claims and the provided reference. The Examiner respectfully encourages Applicants to provide further specificity to overcome the broad nature of terms such as “graphical” since the Examiner must consider patentable distinction when formulating a decision with respect to the patentability of the presented claims.

ix) Examiner has cited particular columns and line numbers in the references applied to the claims for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in their entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner.

x) The Examiner respectfully requests, in the event the Applicants choose to amend or add new claims, that such claims and their limitations be directly mapped to the specification, which provides support for the subject matter. This will assist in expediting compact prosecution.

Art Unit: 2128

xi) Further, the Examiner respectfully encourages Applicants to direct the specificity of their response with regards to this office action to the broadest reasonable interpretation of the claims as presented. This will avoid issues that would delay prosecution such as limitations not explicitly presented in the claims, intended use statements that carry no patentable weight, mere allegations of patentability, and novelty that is not clearly expressed.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. **Claim(s) 1-6, 12-18, 20-78 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Kodosky et al. "System and Method for Programmatically Generating a Graphical Program in Response to a State Diagram" U.S. Patent Application Publication # 2002/0083413 A1.**

Regarding Claim 1:

Kodosky et al. discloses a computer-implemented method comprising:

providing a graphical user interface for defining at least one function to be used in a graphical representation of a finite state machine where the graphical representation is an executable model of the finite state machine. **(Page 14, Paragraph 165, Lines 1-5. Figure 19)**

representing the at least one function graphically, wherein the function that is represented graphically is a function defined in a graphical language; and **(Page 14, Paragraph 165, Lines 1-5. Figure 19)**

calling the function that is represented graphically from within the finite state machine. **(Page 15, Paragraph 166, Lines 11-15)**

Art Unit: 2128

Regarding Claim 2:

Kodosky et al. discloses the method of claim 1 wherein defining the at least one function further comprises using a function block. (Page 14, Paragraph 165, Lines 7-9. Figure 19)

Regarding Claim 3:

Kodosky et al. discloses the method of claim 2 wherein defining the at least one function further comprises using a function prototype. (Page 2, Paragraph 11, Lines 1-6)

Regarding Claim 4:

Kodosky et al. discloses the method of claim 1 wherein the defining step further comprises using a function flow diagram. (Page 1, Paragraph 9, Lines 7-9)

Regarding Claim 5: a computer-implemented method, said method comprising

providing a graphical user interface for defining at least one function to be used in a graphical representation of a finite state machine where the graphical representation is an executable model of the finite state machine. **(Page 14, Paragraph 165, Lines 1-5. Figure 19)**

representing the at least one graphically, wherein the function is represented graphically as a diagram comprising graphical elements; and **(Page 14, Paragraph 165, Lines 1-5. Figure 19)**

calling the function that is represented graphically from within the finite state machine. **(Page 15, Paragraph 166, Lines 11-15)**

Regarding Claim 6:

Kodosky et al. discloses the method of claim 1 further comprising modifying the at least one function through graphical diagramming. (Figure 8)

Regarding Claim 12:

Art Unit: 2128

Kodosky et al. discloses a computer program product, stored in a computer readable medium, comprising instructions to cause a computer to:

receive user input defining at least one graphical function for use in a finite state machine; (**Page 14, Paragraph 165, Lines 1-5. Figure 19**)

use the at least one graphical function in a simulation of a system represented by the finite state machine, wherein the instructions to use the at least one graphical function further comprise instructions to call the at least one graphical function from at least one state or transition in the finite state machine. (**Page 14, Paragraph 165, Lines 1-5. Figure 19**)

Regarding Claim 13:

Kodosky et al. discloses the computer program product of claim 12 wherein the user input defining the at least one graphical function is entered into a function block. (**Page 1, Paragraph 9, Lines 1-2**)

Regarding Claim 14:

Kodosky et al. discloses the computer program product of claim 12 wherein the user input defining the at least one graphical function includes a function prototype. (**Page 2, Paragraph 11, Lines 1-6**)

Regarding Claim 15:

Kodosky et al. discloses the computer program product of claim 12 wherein the user input comprises a function flow diagram. (**Page 1, Paragraph 9, Lines 7-9**)

Regarding Claim 16:

Kodosky et al. discloses the computer program product of claim 15 wherein the function flow diagram is a comprised of graphical elements. (**Figure 8**)

Regarding Claim 17:

Kodosky et al. discloses a system for modeling finite state machines said system comprising:

Art Unit: 2128

a computer comprising a graphical user interface, memory, storage, and at least one input device; (**Page 6,**

Paragraph 63, Lines 1-4)

means to receive user input to define at least one graphical function; (**Page 6, Paragraph 63, Lines 1-8)**

means to represent the graphical function as an executable state flow diagram; (**Page 2, Paragraph 16,**

Lines 4-9)

means to call the graphical function from at least one finite state machine in a simulation of the at least one finite state machine. (**Page 15, Paragraph 166, Lines 13-20)**

Regarding Claim 18:

Kodosky et al. discloses the system of claim 17 wherein the user input to define the at least one graphical function is entered into a function block. (**Page 1, Paragraph 9, Lines 1-2)**

Regarding Claim 20:

Kodosky et al. discloses the system of claim 17 wherein the user input defining the at least one graphical function includes a function prototype. (**Page 2, Paragraph 11, Lines 1-6)**

Regarding Claim 21:

Kodosky et al. discloses the system of claim 17 wherein the user input comprises a function flow diagram. (**Page 1, Paragraph 9, Lines 7-9)**

Regarding Claim 22:

Kodosky et al. discloses the system of claim 21 wherein the function flow diagram is comprised of graphical elements. (**Figure 8)**

Regarding Claim 23:

Kodosky et al. discloses the system of claim 21 further comprising means for hiding the display of the function flow diagram based upon user input. (**Page 1, Paragraph 9, Lines 7-9)**

Art Unit: 2128

Regarding Claim 24:

Kodosky et al. discloses a method of operating a data processing system having a graphical user interface said method comprising:

creating a graphical representation of a finite state machine and a graphical representation of a function for use in the graphical representation of the finite state machine; and **(Page 1, Paragraph 9, Lines 9-14)**

simulating a system represented by the finite state machine wherein the graphical representation is an executable model of the system; and **(Page 1, Paragraph 10, Lines 10-13)**

calling the function from the executable model of the system during the act of simulating the system represented by the finite state machine. **(Page 14, Paragraph 165, Lines 1-5. Paragraphs 168-172. Figure 19)**

Regarding Claim 25:

Kodosky et al. discloses the method of claim 24 wherein the graphical representation of the function comprises a function prototype. (Page 2, Paragraph 11, Lines 1-6)

Regarding Claim 26:

Kodosky et al. discloses the method of claim 25 wherein the function prototype defines a textual format for invoking the function. (Paragraph 132 Lines 1-5. Figure 8)

Regarding Claim 27:

Kodosky et al. discloses the method of claim 26 wherein the graphical representation of the finite state machine includes at least one invocation of the function using the defined textual format. (Page 12, Paragraph 132 Lines 1-5. Figure 8)

Regarding Claim 28:

Kodosky et al. discloses the method of claim 24 further comprising shadowing a function, wherein shadowing comprising using in a function invocation a function definition closest to a point of invocation of the

Art Unit: 2128

function in a state diagram hierarchy. **(Page 3, Paragraph 20, Lines 8-13; Creators priority order can allow for closest function definition to execute.)**

Regarding Claim 29

Kodosky et al. discloses the method of claim 24 wherein the function is exportable by a state chart and may be invoked anywhere in the finite state machine in which the chart appears, including other charts that define the finite state machine. **(Page 3, Paragraph 26, Lines 4-10. Page 9, Paragraph 100, Lines 1-5)**

Regarding Claim 30:

Kodosky et al. discloses the method of claim 24 wherein simulating the system represented by the finite state machine further comprises computer code generation. **(Page 12, Paragraph 133, Lines 1-4)**

Regarding Claim 31:

Kodosky et al. discloses the method of claim 24

wherein the graphical representation of the function comprises a function prototype defining a textual format for invoking the function; **(Page 12, Paragraph 132, Lines 1-5. Figure 8)**

and wherein the graphical representation of the finite state machine includes an invocation of the function using the defined textual format. **(Page 12, Paragraph 132, Lines 1-5. Figure 8)**

Regarding Claim 32:

Kodosky et al. discloses a computer readable medium having encoded thereon

instructions for causing a computer system to receive through a graphical user interface graphical representation of a finite state machine and a graphical representation of at least one function for use in the graphical representation of the finite state machine; and **(Page 1, Paragraph 9, Lines 9-14)**

instructions for simulating a system represented by the finite state machine where the graphical representation is an executable model of the system; and **(Page 1, Paragraph 10, Lines 10-13)**

Art Unit: 2128

instructions for calling the function from at least one place in the executable model during the system simulation. (Page 14, Paragraph 165, Lines 1-5. Paragraphs 168-172. Figure 19)

Regarding Claim 33:

Kodosky et al. discloses the computer readable medium of claim 32, wherein the graphical representation of the function comprises a function prototype defining a textual format for invoking the function; (Page 2, Paragraph 11, Lines 1-6)

and wherein the graphical representation of the finite state machine includes an invocation of the function using the define textual format. (Page 12, Paragraph 132 Lines 1-5. Figure 8)

Regarding Claim 34:

Kodosky et al. discloses in an electronic device, a method of graphically representing an event-driven system, said method comprising:

Providing one or more block components representing one or more states in an executable model; (Page 1, Paragraph 9, Lines 1-3)

Providing one or more transition components representing transitions between the one or more block states; (Page 2, Paragraph 16, Lines 1-4) and

Providing a function, said function comprising at least two graphical components and being referenced by at least one the states or at least one of the transitions to call the function at the at least one of the states or the at least one of the transitions. (Page 2, Paragraph 17, Lines 1-4)

Regarding Claim 35:

Kodosky et al. discloses the method of claim 34, wherein the function accepts at least one argument and returns at least one result. (Page 1, Paragraph 9, Lines 1-4)

Regarding Claim 36:

Art Unit: 2128

Kodosky et al. discloses the method of claim 34, further comprising invoking the function at a second one of the one or more transition components or one or more block components. (Page 12, Paragraph 132 Lines 1-5. Figure 8. Page 1, Paragraph 10, Lines 1-5)

Regarding Claim 37:

Kodosky et al. discloses the method of claim 34 further comprising specifying data properties of the function. (Page 1, Paragraph 9, Lines 7-9)

Regarding Claim 38:

Kodosky et al. discloses the method of claim 34 further comprising associating a data item with the function. (Page 1, Paragraph 9, Lines 7-9. Page 2, Paragraph 11, Lines 2-7)

Regarding Claim 39:

Kodosky et al. discloses the method of claim 34, wherein the function comprises a graphical function. (Page 6, Paragraph 63, Lines 1-8)

Regarding Claim 40:

Kodosky et al. discloses the method of claim 34, wherein the function has a plurality of configurable properties. (Page 1, Paragraph 10, Lines 1-5)

Regarding Claim 41:

Kodosky et al. discloses the method of claim 34, wherein the function defines a textual format for invoking the function. (Page 12, Paragraph 132 Lines 1-5. Figure 8)

Regarding Claim 42:

Kodosky et al. discloses the method of claim 34, further comprising providing a shadowing function, wherein shadowing comprises using in a function invocation a function definition proximally closest to a point of

Art Unit: 2128

invocation of the function in a state diagram hierarchy. **(Page 3, Paragraph 20, Lines 8-13; Creators priority order can allow for closest function definition to execute.)**

Regarding Claim 43:

Kodosky et al. discloses in a graphical representation environment, a system for graphically representing an event-driven system, said system comprising:

One or more block components representing one or more states in an executable model; **(Page 1, Paragraph 9, Lines 1-3)**

One or more transition components representing transitions between the one or more block components representing the states; **(Page 2, Paragraph 16, Lines 1-4) and**

A component representing a graphical function and referenced by at least one of the states or at least one of the transitions to call the function at one of the states or one of the transition. **(Page 2, Paragraph 17, Lines 1-4)**

Regarding Claim 44:

Kodosky et al. discloses the system of claim 43, wherein the function accepts at least one argument and returns at least one result. **(Page 1, Paragraph 9, Lines 1-4)**

Regarding Claim 45:

Kodosky et al. discloses the system of claim 43, wherein at least a subset of the one or more block components representing the states and the one or more transition components can invoke the function. **(Page 12, Paragraph 132 Lines 1-5. Figure 8. Page 1, Paragraph 10, Lines 1-5)**

Regarding Claim 46:

Kodosky et al. discloses the system of claim 43, further comprising means for specifying data properties of the function. **(Page 1, Paragraph 9, Lines 7-9)**

Regarding Claim 47:

Art Unit: 2128

Kodosky et al. discloses the system of claim 43, further comprising means for associating a data item with the function. (Page 1, Paragraph 9, Lines 7-9. Page 2, Paragraph 11, Lines 2-7)

Regarding Claim 48:

Kodosky et al. discloses the system of claim 43, wherein the component representing the function is referenced by one more of: at least one of the states or at least one of the transitions. (Page 6, Paragraph 63, Lines 1-8)

Regarding Claim 49:

Kodosky et al. discloses the system of claim 43, wherein the function has a plurality of configurable properties. (Page 1, Paragraph 10, Lines 1-5)

Regarding Claim 50:

Kodosky et al. discloses the system of claim 43, wherein the function defines a textual format for invoking the function. (Page 12, Paragraph 132 Lines 1-5. Figure 8)

Regarding Claim 51:

Kodosky et al. discloses the system of claim 43, further comprising means for providing a shadowing function, wherein shadowing comprises using in a function invocation a function definition proximally closest to a point of invocation of the function in a state diagram hierarchy. (Page 3, Paragraph 20, Lines 8-13; Creators priority order can allow for closest function definition to execute.)

Regarding Claim 52:

Kodosky et al. discloses a medium for use in a graphical representation environment on an electronic device, the medium holding instructions executable using the electronic device for graphically representing an event-driven system, said instructions comprising instructions of:

Art Unit: 2128

Providing one or more block components representing one or more states in an executable model; (**Page 1, Paragraph 9, Lines 1-3**)

Providing one or more transition components representing transitions between the one or more block components representing the states; (**Page 2, Paragraph 16, Lines 1-4**) and

Providing a block component representing a graphical function and reference by at least one of the states or at least one of the transitions to call the function at one of the states or one of the transitions during execution of the event-driven system. (**Page 2, Paragraph 17, Lines 1-4**)

Regarding Claim 53:

Kodosky et al. discloses the medium of claim 52, wherein the function accepts at least one argument and returns at least one result. (**Page 1, Paragraph 9, Lines 1-4**)

Regarding Claim 54:

Kodosky et al. discloses the medium of claim 52, wherein the one or more transition components can invoke the function. (**Paragraph 132 Lines 1-5. Figure 8. Page 1, Paragraph 10, Lines 1-5**)

Regarding Claim 55:

Kodosky et al. discloses the medium of claim 52, further comprising instructions for accepting user input specifying data properties of the function. (**Page 1, Paragraph 9, Lines 7-9**)

Regarding Claim 56:

Kodosky et al. discloses the medium of claim 52, further comprising instructions for associating a data item with the function. (**Page 1, Paragraph 9, Lines 7-9. Page 2, Paragraph 11, Lines 2-7**)

Regarding Claim 57:

Kodosky et al. discloses the medium of claim 52, wherein the function comprises two or more graphical elements. (**Page 6, Paragraph 63, Lines 1-8**)

Regarding Claim 58:

Kodosky et al. discloses the medium of claim 52, wherein the function has a plurality of configurable properties. (Page 1, Paragraph 10, Lines 1-5)

Regarding Claim 59:

Kodosky et al. discloses the medium of claim 52, wherein the function defines a textual format for invoking the function. (Page 12, Paragraph 132 Lines 1-5. Figure 8)

Regarding Claim 60:

Kodosky et al. discloses the medium of claim 52, further comprising instructions for providing a shadowing function wherein shadowing comprises using in a function invocation a function definition proximally closest to a point of invocation of the function in a state diagram hierarchy. (Page 3, Paragraph 20, Lines 8-13; Creators priority order can allow for closest function definition to execute.)

Regarding Claim 61:

Kodosky et al. discloses A computer implemented method for modeling a system using a graphical block diagram environment, said method comprising:

graphically representing a function for use in an executable model within the graphical block diagram environment; (Page 14, Paragraph 165, Lines 1-5. Figure 19) and

textually referencing the graphically represented function within the model to cause an invocation of the graphically represented function during execution of the model. (Paragraph 132 Lines 1-5. Figure 8)

Regarding Claim 62:

Kodosky et al. discloses The computer implemented method of claim 61, wherein the model is represented as a finite state machine. (Page 3, Paragraph 20, Lines 8-13)

Art Unit: 2128

Regarding Claim 63:

Kodosky et al. discloses The computer implemented method of claim 62, wherein the finite state machine is a hierarchical finite state machine. (Page 3, Paragraph 20, Lines 8-13)

Regarding Claim 64:

Kodosky et al. discloses The computer implemented method of claim 62 further comprising:

Associating the graphically represented function with at least one state or transition within the finite state machine. (Page 2, Paragraph 16, Lines 1-4)

Regarding Claim 65:

Kodosky et al. discloses The computer implemented method of claim 61, wherein the graphically represented function is represented as at least one of a finite state machine, a state flow diagram, a function flow diagram, and a graphical block diagram model. (Page 3, Paragraph 20, Lines 8-13)

Regarding Claim 66:

Kodosky et al. discloses A medium holding instructions executable using the electronic device for modeling a system using a graphical block diagram environment, said instructions comprising instructions for:

Graphically defining a function for use in an executable model within the graphical block diagram environment; (Page 14, Paragraph 165, Lines 1-5. Figure 19)

textually referencing the graphically represented function within the model to cause an invocation of the graphically represented function during execution of the model. (Paragraph 132 Lines 1-5. Figure 8)

Regarding Claim 67:

Kodosky et al. discloses The medium of claim 66, wherein the model is represented as a finite state machine. (Page 3, Paragraph 20, Lines 8-13)

Regarding Claim 68:

Art Unit: 2128

Kodosky et al. discloses The medium of claim 67 further comprising instructions for:

Associating the graphically represented function with at least one state of transition within the finite state machine. **(Page 2, Paragraph 16, Lines 1-4)**

Regarding Claim 69:

Kodosky et al. discloses The medium of claim 66, wherein the graphically represented function is represented as at least one or a combination of:

a finite state machine, **(Page 3, Paragraph 20, Lines 8-13)**

a state flow diagram,

a function flow diagram,

and a graphical block diagram model.

Regarding Claim 70:

Kodosky et al. discloses A computer implemented system for modeling using a graphical block diagram environment, said system comprising:

Means for representing a function defined graphically for use in an executable model within the graphical block diagram environment; **(Page 14, Paragraph 165, Lines 1-5. Figure 19)** and

Means for textually referencing the function defined graphically within the model to cause an invocation of the function during execution of the model. **(Paragraph 132 Lines 1-5. Figure 8)**

Regarding Claim 71:

Kodosky et al. discloses The system of claim 70, wherein the model is represented as a finite state machine. **(Page 3, Paragraph 20, Lines 8-13)**

Regarding Claim 72:

Kodosky et al. discloses The system of claim 71 further comprising means for associating the graphically represented function with at least one state of transition within the finite state machine. **(Page 3, Paragraph 20, Lines 8-13)**

Art Unit: 2128

Regarding Claim 73:

Kodosky et al. discloses The system of claim 70, wherein the graphically represented function is represented as at least one or a combination of a finite state machine, a state flow diagram, a function flow diagram, and a graphical block diagram model. **(Page 3, Paragraph 20, Lines 8-13)**

Regarding Claim 74:

Kodosky et al. discloses A graphical block diagram modeling system comprising:

A graphical function for use in an executable model, wherein at least subset of commands of the graphical function are defined through a graphical representation; **(Page 14, Paragraph 165, Lines 1-5. Figure 19)** and

A graphical representation of the model including a textual reference of the graphically represented function within the graphical representation of the model to cause an invocation of the graphical function during execution of the model. **(Paragraph 132 Lines 1-5. Figure 8)**

Regarding Claim 75:

Kodosky et al. discloses The system of claim 74, wherein the model is represented as a finite state machine. **(Page 3, Paragraph 20, Lines 8-13)**

Regarding Claim 76:

Kodosky et al. discloses The system of claim 75, wherein the finite state machine is a hierarchical finite state machine. **(Page 3, Paragraph 20, Lines 8-13)**

Regarding Claim 77:

Kodosky et al. discloses The system of claim 75, wherein the finite state machine further comprises at least one state or transition associated with the graphical function. **(Page 3, Paragraph 20, Lines 8-13)**

Regarding Claim 78:

Art Unit: 2128

Kodosky et al. discloses The system of claim 74, wherein the graphical function is represented as at least one or a combination of:

a finite state machine, (Page 3, Paragraph 20, Lines 8-13)

a state flow diagram,

a function flow diagram,

and a graphical block diagram model.

Conclusion

4. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

5. The prior art made of record is not relied upon because it is cumulative to the applied rejection. These references include:

A) Stateflow Version 2. Mathworks. May 1999.

6. All Claims are rejected.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Saif A. Alhija whose telephone number is (571) 272-8635. The examiner can normally be reached on M-F, 11:00-7:30.


Art Unit: 2128

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kamini Shah can be reached on (571) 272-22792279. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SAA

July 21, 2007


KAMINI SHAH
SUPERVISORY PATENT EXAMINER